

## Monthly Report for September 2018

*Submitted October 5, 2018*

### Meetings and Conferences

#### The Governor's P-20 Leadership Council of Maryland

Ann Kellogg presented an overview of the *College Degrees to Career Pathways* project to the P-20 Council on September 11, 2018. The MLDS Center has been working in close collaboration with community college stakeholders and the Maryland Higher Education Commission (MHEC) to develop a series of dashboards that analyze the pathway community college students follow through career and transfer degrees to enter the workforce. The MLDS Center wanted to inform the P-20 Council of its work and solicit feedback from the Council on the project. The Council agreed this project would be beneficial to the State and were particularly interested in seeing data disaggregated by critical workforce areas as well as by high school program completion type.

#### MHEC Segmental Advisory Council

Ann Kellogg presented an overview of the *College Degrees to Career Pathways* project to the Segmental Advisory Council of the Maryland Higher Education Commission (MHEC) on September 17, 2018. The Segmental Advisory Council is a statutory advisory council comprised of chief executive officers from each MHEC education segment. The Segmental Advisory Council is an important stakeholder in this project. Council members were very enthusiastic about the project and indicated the importance of studying the transfer and workforce outcomes for community college students in both career and transfer degrees. The Council was provided with a list of questions that are guiding the project and asked to share the document with appropriate stakeholders. The Center is interested in obtaining feedback on this project from all stakeholders. The Council provides an important conduit to stakeholders at each campus.

#### Research and Policy Advisory Board Meeting

The Research and Policy Advisory Board (RPB) meeting was held on September 6th. The Center provided updates on the progress of Output priorities for 2018-2019. The Research Branch provided updates on several research projects and grant submissions, including the IES grant-funded International Baccalaureate project and a proposal for a Spencer Foundation grant to continue the work undertaken earlier on the long-term effects of poverty on academic and career outcomes.

Ann Kellogg engaged RPB in a discussion about the population definitions that should be used as the basis of the High School Graduates - Initial College Enrollments dashboard series. Ms. Kellogg solicited feedback on options for defining the baseline cohort and FARMS eligibility for this dashboard series. Attendees discussed the advantages and disadvantages of using the 9th grade cohort, graduates and 12th grade exiters as the starting population. It was suggested that the Center should determine if there are any relevant national standards for reporting college-going rates of high school students as the Center may wish to align its reporting to those standards. Attendees also discussed the limitations of the FARMS indicator and whether restricting the dashboard to FARMS eligibility in 12th grade was an appropriate

approach for the dashboard. Applying the FARMS methodology developed for the Research Branch poverty study to this dashboard was also discussed. Attendees generally agreed using only 12th grade FARMS status was not valid as high school students are under-reported for FARMS. Conversely, adopting the FARMS methodology from the poverty study was deemed unfeasible as it requires FARMS data beginning in 6th grade and only 3 cohorts have sufficient data to use this as the indicator. The Center will continue to explore options for creating a dashboard on college-going rates of FARMS students.

#### Career Preparation Expansion Act of 2017 (SB978)

The Career Preparation Expansion Act of 2017 (SB978), requires the Maryland Longitudinal Data System (MLDS) Center and the Governor's Workforce Development Board (GWDB) to produce a report on employment outcomes for high school graduates five years after graduation, which must be submitted on or before December 1<sup>st</sup> of each year to the Governor and General Assembly. Ross Goldstein and Ann Kellogg met with Michael DiGiacomo and Grason Wiggins of the GWDB on September 27th to review the preliminary tables pulled for the report. The results and methodologies for each table were discussed. The Center and the GWDB will present the tables at the Research and Policy Board meeting on October 4<sup>th</sup> for feedback on methodology.

#### **Center Output**

##### Dual Enrollment Report and Dashboards

The Center prepared tables for the *Annual Dual Enrollment Report* and to add additional years of data to the dashboards on that topic. The report specifications will not change from the prior year's report. The Center does plan to expand the dual enrollment dashboard series to include data from the report on college-going rates of dually enrolled students. A preliminary draft of the dashboard pages is under internal review.

##### Website Design

Center staff has made a number of design and navigation improvements to the website. The Center Reports, Research Reports, Information Briefs, and Presentations pages have all been redesigned to align to the Dashboard page layout. The Presentations page has been redesigned to highlight a small selection of presentations, with a link to the full presentation archive. The Center has also decided to move the Research Series content into the Center Output section of the website. The Research Series page will be redesigned to align to the other Center Output pages.

##### Race-to-the-Top Dashboards

The MLDS Center website will host a series of Maryland State Department of Education (MSDE) P-12 Teacher Dashboards. This series is from a larger collection of MSDE P-12 longitudinal data system dashboards that were created by MSDE through Race-to-the-Top funds. The Center will host the teacher dashboards from this series, the remaining dashboards will be decommissioned. Eliminating the servers, website and contractors associated with these dashboards is a cost-savings measure for MSDE. In return, MSDE will continue to fund the MLDSC Oracle license for the remainder of FY19. MLDSC will continue to develop its series of teacher-related dashboards so that many of the data points in the MSDE dashboards can be replicated in MLDSC dashboards. The P-12 Teacher Dashboards are accessible by clicking a link at the bottom of the MLDSC website homepage.

## **Research Branch**

### Research Grants

Awarded. The U.S. Department of Education has awarded [Promise Heights](#), an initiative led by the University of Maryland School of Social Work (SSW), a 5-year \$30 million grant to continue its effort to strengthen children and families in the West Baltimore neighborhood of Upton/Druid Heights. The grant award was announced by the U.S. Department of Education as part of the Promise Neighborhoods Implementation Grants Program. Promise Neighborhoods support schools in high-poverty communities to become vibrant centers of opportunity and excellence. The grant included funding for the MLDS Center to do analyses to evaluate education and workforce outcomes for students.

Applications. The American Educational Research Association (AERA) Grants Program, with support from the National Science Foundation, has issued an RFP for highly competitive studies using rigorous quantitative methods to examine large-scale, education-related data. This grant would award \$25,000 for 1 year or \$35,000 for 2 years. The MLDS Research Branch has been coordinating three competitive applications for this grant program. First, Drs. Henneberger and Rose are crafting an application focused on student and school level poverty and long-term college and career outcomes. The specific focus of the proposal is to enhance the MLDS by linking to U.S. Census Bureau data to help address the declining analytic value of eligibility for free and reduced price meals (FARMS). Second, Dr. Blazar is crafting an application focused on teachers' effects on long-term academic and career outcomes, with a specific focus on early teachers' effects. Third, the research branch is attempting to coordinate with an expert in a STEM area to submit a third application focused on the long term outcomes associated with STEM education for underrepresented students.

The Spencer Foundation small research grants program provides funding for research that focuses on improving education around the world. This grant would award \$50,000 for 1 or 2 years. Drs. Henneberger, Rose, and Mushonga are crafting an application that will focus on identifying the risk and protective factors associated with long-term college and career outcomes for students living in poverty. This application extends work presented at the Maryland Commission for Innovation and Excellence in Education in July and August of 2018.

### Research Reports

Examining rates of multiple membership (students attending multiple schools) in the MLDS data is important to identifying the best ways to handle this multiple membership in research analyses. The research team has run multilevel models predicting one cohort of high school students' college enrollment and wage amount in the year following the 12th grade. In order to examine the impact of multiple membership data structure on the statistical inferences, results were compared using the following two approaches: (1) the naive first-school hierarchical linear modeling approach (HLM); and (2) a multiple membership random effects model approach (MMREM). Analyzed against various criteria, the MMREM approach handled the multiple membership analyses better. This project was presented at the September research and policy advisory board and feedback was received and will be incorporated moving forward.

The research report focusing on disentangling the individual level and school level predictors of needing remedial coursework in Maryland community colleges has been submitted for publication to the MLDS Center website.

The research branch has been working on creating tables and graphs/charts for a research report on our work focusing on the long-term relations between student and school poverty and college and career outcomes. The descriptive statistics and the model results for poverty and race predicting outcomes have been put into tables and graphs, and the results for each table and graph have been drafted.

### Research Series

The research team coordinated with Baltimore City Public Schools for the first research series of the Fall semester, which will be held on October 4, 2018. The presentation focuses on the methodology of the longitudinal and historical poverty analysis and subsequent school-level and student subgroup analyses using data from Baltimore City Public Schools. The second part of the presentation will discuss how the Office of Achievement and Accountability (OAA) in Baltimore City Public Schools assessed the impact of the change in the poverty measurement process on school-level poverty rates using a multivariate prediction model.

### Personnel and Administration

Dr. Tracy Sweet, Assistant Professor of Human Development and Quantitative Methodology, at the University of Maryland College Park, will be taking over as the Principal Investigator (PI) of the College Park sub-contract of the research branch. Dr. Sweet holds a Ph.D. in statistics from Carnegie Mellon University, and she is an expert on statistical social network models, with a particular focus on the types of multilevel network models needed for educational data.

The research branch has been coordinating with the University of Maryland School of Social Work Institutional Review Board (IRB) to update the MLDS Center IRB for the 2018-2019 academic year. Updates include the addition of research branch team members and MLDS Center staff members.

## **System Management**

### Tasks

The system management team:

1. Worked with DoIT to create Virtual Private Routing Network (VPRN) to 550 West Baltimore Street so MLDS users there can be part of direct access to MLDS Network;
2. Completed Encryption for hard drive with DoIT for the new MLDS desktops;
3. Completed all processes for new MLDS research staff including creating virtual machines and all related software installations;

4. Completed back end database and network work with MSDE to host some of the RTTT dashboards on MLDSC website;
5. Along with MSDE and DoIT, continued to evaluate different options for continuing the Center's Oracle licensing;
6. Started work with MSDE to add two more servers to MLDSC environment to increase performance;
7. Continued to meet monthly to address security issues and complete actions to tighten the Center's security profile, including creating Center internal monitoring report; and
8. Applied all required monthly desktop and server patches.

#### Data Loads

The system management team:

1. Completed data loading for PARCC 2015, 2016 and 2017;
2. Completed loading MSDE K12 2018 staff data; and
3. Performed ongoing identity resolution for individuals who have multiple system ID's for the same identifier.